REMARKS

The Office Action dated January 5, 2004 has been received and carefully studied.

The Examiner rejects claim 12 under 35 U.S.C. §102(b) as being unpatentable over Chao, U.S. Patent No. 5,109,030 for reasons of record.

The rejection is respectfully traversed.

Claim 12 is directed to a fireproofing slurry composition per se. That slurry composition includes the hydraulic binder, the foam stabilizing agent and a set retarder. It is the slurry composition that provides a settable foam capable of spray application, as claim 12 expressly recites that the slurry composition (which comprises the hydraulic binder, foam stabilizing agent, and a set retarder), when mixed with water and gas, provides a settable foam capable of spray application. Thus, this entire slurry composition, when mixed with water and gas, provides the settable foam.

In contrast, Chao discloses making a foam by mixing a first component that is a foamed mixture with a second component that is a hydraulic slurry. That is, Chao first forms a prefoam component, which is a foamed mixture of water, the foam stabilizer, and preferably a foaming agent. The second component is a hydraulic slurry that contains water, a water reducer, and one or more hydraulic substances. The first component foamed mixture is then thoroughly mixed with the second component hydraulic slurry to form the final composition. Chao thus does not disclose or suggest a slurry composition, that when mixed with water and gas, provides a settable foam capable of spray application to a steel

substrate and which, after spray application is adherent to said substrate in the foamed state and after setting. That is, there is no slurry composition of Chao that when mixed with water and gas, provides a settable foam; the slurry composition of Chao is never mixed with gas to provide a foam, it is mixed with an already foamed composition to provide the final composition.

The Examiner maintains the rejection of claims 1-6 under 35 U.S.C. §103(a) as being unpatentable over Chao in view of SU 1743887, and claims 7-11 as being unpatentable over Chao in view of SU 1743887 and further in view of Nebesnak. The Examiner admits that Chao fails to teach the claimed method of making the foam, but cites SU '887 as teaching a method of preparing foam wherein compressed air and the foaming solution are fed from two different hoses to a vortex generating sleeve wherein the sleeve creates turbulent flow conditions to produce foam. The Examiner concludes that it would have been obvious to have foamed the Chao composition using the SU '887 method.

The rejection is respectfully traversed.

The Examiner did not specifically address Applicants' argument that the presence of the screen in the SU '887 foam generating device would render the device useless were particulate materials such as hydraulic binders involved. The instant method claims recite a method of producing a hydraulic binder foam including the steps of forming a slurry comprising a hydraulic binder, a foam stabilizing agent and water, conveying the slurry to a length of hose, and causing the slurry to foam. Thus, the method involves foaming a hydraulic slurry, which though difficult, results in the advantages touted in the instant specification. Chao

et al. do not disclose or suggest foaming a hydraulic slurry. Instead, Chao teaches foaming a prefoam component of water and copolymeric foam stabilizer, and thoroughly mixing the resulting foam with a hydraulic slurry. A slurry comprising a hydraulic binder, foam stabilizing agent and water is not foamed as required by the instant claims.

SU '887 does not supply the deficiencies of Chao. Specifically, SU '887 discloses a foam generator having nozzles for supplying a foaming agent and a dispersing agent, a mixing chamber and a screen. The chamber for mixing and forming the foam contains vortex-forming elements. Compressed air and foaming agent enter the mixing chamber through respective nozzles and mix intensively as a result of their interaction with the vortex-forming elements. The foamed mixture then passes through a screen and is conveyed to another location where mortar is prepared.

Accordingly, SU '887 nowhere discloses or suggests foaming a slurry that includes hydraulic binder as required by the instant claims. Were one skilled in the art motivated to combine the teachings of SU '887 and Chao, at best the resulting combination would lead to the modification of the prefoam component of Chao - that is, the component devoid of the hydraulic substances. However, the presence of the screen in the SU '887 foam generator device renders the device useless where particular materials, such as hydraulic binders, are involved. Nowhere do the combination of Chao and SU '887 teach the method of foaming a slurry comprising hydraulic binder, foam stabilizing agent and water as recited in the instant claims.

Nebesnak does not supply the deficiencies of Chao and SU '887.

Reconsideration and favorable action are respectfully requested in view of the foregoing.

Respectfully submitted,

Kevin S. Lemack
Reg. No. 32,579
176 E. Main Street - Suite 8
Westboro, Massachusetts 01581
TEL: (508) 898-1818